

CLAIMS

1. A method of capturing communication associated information (CAI) of a communication between a subject and an associate, the method comprising the steps of:

intercepting the communication, the communication comprising at least one packet and each packet comprising CAI;

5 providing an application identifier (AID) in the at least one packet of the communication, the AID identifying the format of the CAI;

10 extracting in accordance with the AID the CAI from the at least one packet for reporting;

determining whether the extracted CAI is a new instance of the CAI; and

15 reporting a first message in response to a determination that the extracted CAI is the new instance of the CAI.

2. The method of Claim 1, wherein the method further comprises the steps of:

20 determining whether a given amount of time has elapsed between packets of the at least one packet of the communication, the packets being identified by the CAI; and

25 reporting a second message in response to a determination that the given amount of time has elapsed.

3. The method of Claim 2, wherein the second message comprises at least one of a subject identifier, a time stamp indicating when the message was sent, the IP address of the subject, a packet direction indicator identifying whether the 5 message was sent or received by the subject, the IP address of the associate, a first instance indicator identifying the new instance of the CAI, and a counter indicating the number of packets identified by the CAI seen since a last message.

4. The method of Claim 1, wherein the method further 10 comprises the steps of:

determining whether a given number of packets of the at least one packet of the communication has been intercepted, the packets being identified by the CAI; and

15 reporting a third message in response to a determination that the given number of packets identified by the CAI has been intercepted.

5. The method of Claim 4, wherein the third message comprises at least one of a subject identifier, a time stamp 20 indicating when the message was sent, the IP address of the subject, a packet direction indicator identifying whether the message was sent or received by the subject, the IP address of the associate, a first instance indicator identifying the new instance of the CAI, and a counter indicating the number of 25 packets identified by the CAI seen since a last message.

6. The method of Claim 1, wherein the AID is located in the Network Layer 3.

7. The method of Claim 1, wherein the AID is located in the protocol field of the Network Layer 3.

8. The method of Claim 1, wherein the AID is located in the optional field of the Network Layer 3.

5 9. The method of Claim 1, wherein the method further comprises the step of:

providing an AID-tag in the at least one packet of the communication, the AID-tag indicating the presence of the AID.

10 10. The method of Claim 1, wherein the method further comprises the steps of:

providing an AID-tag in the at least one packet of the communication, wherein the AID-tag indicates the presence of the AID, and wherein the AID-tag is located in the protocol field of the Network Layer 3.

15 11. The method of Claim 1, wherein the first message comprises at least one of a subject identifier, a time stamp indicating when the message was sent, the IP address of the subject, a packet direction indicator identifying whether the message was sent or received by the subject, the IP address of the associate, a first instance indicator identifying the new instance of the CAI, and a counter indicating the number of packets identified by the CAI seen since a last message.

12. A method of consolidating at least one packet of a communication between a subject and an associate, the method comprising the steps of:

receiving at least one packet of the communication,  
5 each packet comprising communication associated information (CAI);  
determining whether a packet is a new instance of the CAI;  
reporting the CAI in response to a determination  
10 that the packet is a new instance of the CAI;  
and  
reporting the CAI periodically in response to a determination that the packet is a subsequent packet.

15 13. The method of Claim 12, wherein the step of determining whether a packet is a new instance of the CAI is performed by comparing the CAI with a previous CAI.

14. The method of Claim 12, wherein the step of determining whether a packet is a new instance CAI is  
20 performed by allowing a given amount of time to elapse since the receipt of the at least one packet.

15. The method of Claim 12, wherein the CAI report comprises at least one of a subject identifier, a time stamp indicating when the message was sent, the IP address of the  
25 subject, a packet direction indicator identifying whether the message was sent or received by the subject, an associate

identifier, a first instance indicator identifying the new instance of the CAI, and a counter indicating the number of packets identified by the CAI seen since a last report.

16. A method of providing access to communication associated information (CAI) of at least one packet of a communication between a subject and an associate, the method comprising the steps of:

5           providing an application identifier (AID) in the at least one packet, the AID indicating a format of the CAI in the at least one packet;

10          intercepting at least one of the at least one packet of the communication with the subject;

             extracting in accordance with the AID the CAI from the packet;

             formatting a message comprising at least a portion of the extracted CAI; and

             providing access to the message.

15          17. The method of Claim 16, wherein the message comprises at least one of a subject identifier, a time stamp indicating when the message was sent, the IP address of the subject, a packet direction indicator identifying whether the message was sent or received by the subject, an associate identifier, a first instance indicator identifying the new instance of the CAI, and a counter indicating the number of packets identified by the CAI seen since a last message.

18. A method of indicating the format of CAI in at least one packet of a communication, the method comprising the steps of:

providing an application identifier tag in the at  
5 least one packet, the application identifier indicating the presence of an application identifier and communication associated information (CAI); and

providing the application identifier in the at least  
10 one packet, the application identifier indicating the format of the CAI.

19. The method of Claim 18, wherein the application identifier tag is located in the protocol field of the Network Layer 3.

15 20. The method of Claim 18, wherein the application identifier is located in the optional field of the Network Layer 3.

21. A method of indicating the format of communication associated information (CAI) in at least one packet of a communication by providing an application identifier in the least one packet.

5        22. The method of Claim 21, wherein the application identifier is located in the protocol field of the Network Layer 3.

23. An apparatus for providing access to communication associated information (CAI) of a communication between a subject and an associate, the apparatus comprising:

means for intercepting the communication, the  
5 communication comprising at least one packet  
and each packet comprising CAI;  
means for providing an application identifier (AID)  
in the at least one packet of the communication, the AID identifying the format  
10 of the CAI;  
means for extracting in accordance with the AID the  
CAI from the at least one packet for reporting;  
means for determining whether the extracted CAI is a  
new instance of the CAI; and  
15 means for reporting a first message in response to a  
determination that the extracted CAI is the new  
instance of the CAI.

24. The apparatus of Claim 23, wherein the apparatus  
further comprises:

20 means for determining whether a given amount of time  
has elapsed between packets of the at least one  
packet of a communication, the packets being  
identified by the CAI; and  
means for reporting a second message in response to  
25 a determination that the given amount of time  
has elapsed.

25. The apparatus of Claim 23, wherein the apparatus further comprises:

means for determining whether a given number of packets of the at least one packet of the communication has been intercepted, the packets being identified by the CAI; and

means for reporting an intermediate CAI message in response to a determination that the given number of packets of the at least one packet of the communication has been intercepted.

10

26. The apparatus of Claim 23, wherein the apparatus further comprises:

means providing an AID-tag in the at least one packet of the communication, the AID-tag indicating the presence of the AID.

15

27. The apparatus of Claim 23, wherein the apparatus further comprises:

means for providing an AID-tag in the at least one packet of the communication, wherein the AID-tag indicates the presence of the AID, and wherein the AID-tag is located in the protocol field of the Network Layer 3.

20

28. An apparatus for consolidating at least one packet of a communication between a subject and an associate, the apparatus comprising:

means for receiving at least one packet of the communication, each packet comprising communication associated information (CAI);  
5 means for determining whether a packet is a new instance of CAI;  
means for reporting the CAI in response to a determination that the packet is the new instance of CAI; and  
10 means for reporting the CAI periodically in response to a determination that the packet is a subsequent packet.

29. An apparatus for providing access to communication associated information (CAI) of at least one packet of a communication with a subject, the apparatus comprising:

means for providing an application identifier (AID)

5           in the at least one packet, the AID indicating a format of the CAI in the at least one packet;

means for intercepting at least one of the at least one packet of the communication with the subject;

10          means for extracting in accordance with the AID the CAI from the packet;

means for formatting a message from the extracted CAI; and

means for providing access to the CAI message.

30. An apparatus for indicating the format of communication associated information (CAI) in at least one packet of a communication, the method comprising the steps of:  
means for providing an application identifier tag in  
5 the at least one packet, the application identifier indicating the presence of an application identifier and CAI; and  
means for providing the application identifier in  
the at least one packet, the application identifier indicating the format of the CAI.  
10